Research Paper | Commerce | E-ISSN No : 2454-9916 | Volume : 2 | Issue : 9 | Sep 2016

A STUDY OF THE DETERMINANTS OF THE LEVEL OF REGULATORY COMPLIANCE OF INDIAN NON-LIFE INSURERS

Dr. Martina R. Noronha [1] | Smeeta N. Khawani [1]

[1] Asst. Professor of Commerce and Accountancy, Sascma English Medium Commerce College, Near Lal Bhai Contractor Stadium, Opposite Govardhan Haveli, Dumas Road, Surat.

ABSTRACT

Compliance with the law framed by the Insurance Regulatory and Development Authority of India is necessary to ensure an orderly conduct of insurance business within the country, alongwith, protection of the interests of the policyholder. But inspite of warnings issued and action taken by the Regulator, many cases of non compliance have been observed by non-life insurers. As such cases of non-compliance defeat the real purpose of regulation and prevent in achieving the desired goals of transparency, solvency and protection, the study attempts to analyse the factors that determine the level of regulatory compliance of Indian non-life insurers. The sample for the study includes all the 28 non life insurers operating in the country. Using multi regression model, the study measured the influence of company size, return on assets, solvency and liquidity on the compliance level of Indian non-life insurers for a period of 11 years from 2005-06 to 2015-16. The results showed that while solvency and return on assets had no influence on compliance level, company size and liquidity had a negative influence on the compliance level of Indian non life insurance companies.

KEYWORDS: IRDA, Regulatory compliance, non life insurers, Non-life Insurance Regulatory Compliance Index (NLIRCI).

Introduction

For the healthy growth of any economy, it is essential that its financial system, including the insurance sector, functions in a manner which not only fuels growth, but which ensures financial protection and stability. While playing the role of risk management and risk minimization, it is necessary that the insurance sector functions in an orderly manner, without prejudice to the interests of its stakeholders. Hence to achieve the above objectives, the insurance sector, which was earlier controlled and regulated by the Government, was opened for private players and foreign investors (subject to a maximum holding of 26%) and IRDA was appointed as its Regulatory body in the year 2000. Since its establishment, IRDA has issued several rules, regulations and guidelines for ensuring proper functioning of the insurance sector. The regulatory framework so designed, relates to almost all matters that concern the business of the insurer, some of which include processing of proposal form, claim settlement, grievance disposal, maintainance of proper books of accounts and required solvency margins, investment norms and compulsory public disclosures.

It has been more than 15 years since the establishment of IRDA and during this period, the insurance sector has undergone significant reforms. While there have been many positive developments, many cases of non compliance have also been observed against the insurers. IRDA, in exercise of its powers, has issued several warnings and levied penalties on such non compliant companies. With the passing of the Insurance Amendment Act 2015, IRDA has taken such matters of non compliance more seriously, and according to the new amendments, permission will be accorded for matters such as raising capital from the market and setting up new place of business, only after the Regulatory body is satisfied about the compliance level of the insurer. Thus, compliance with the law has now become mandatory, affecting the future business prospects of the insurer. Further, compliance with rural and social sector obligations by insurance companies is in national interest as it will ultimately help improve the level of insurance density and insurance penetration in the country. Hence the study attempted to analyze the factors which determine compliance. The study measured the impact of four independent variables namely size, return on assets, liquidity and solvency on the compliance level of non life insurers.

Literature Review

Klumpes, P. J. (1997) conducted a study regarding the propensity of Australian life insurers to voluntarily use jointly-developed Australian and New Zealand Life Insurance Accounting Standards (LIAS). Such propensity of life insurers was predicted to be related to the firm's tax rate, ownership structure, size, expense ratio and solvency. Using evidence from earlier studies, it was hypothesized that firms with relatively high expense ratios and reporting higher income tax adopted AIS for eliminating the information asymmetry about their ability to generate economic income. Further, from the ownership point of view, the study hypothesized that high value share-owned life insurance firms, having access to equity markets, had more incentive to use AIS (to distinguish themselves from other firms) than high value mutual firms, who had no such access. Also, low value life insurance firms, closer to violating their minimum net worth requirements and which would therefore prefer a tax minimising policy, were hypothesized to be IAS non-users. The results of the study confirmed the hypothesis and proved that the voluntary use of AIS was done to reduce the level of information asymmetry faced by life insurance firms in reporting their profitability and to improve their informativeness.

Dumontier, P., & Raffournier, B. (1998) conducted a study using eight determinants (listing status, internationality, size, ownership structure, leverage, capital intensity, profitability and auditor's reputation) to identify the motivations of Swiss listed companies, which voluntary complied with International Accounting Standards, though such compliance meant additional disclosures and renunciation of considerable discretion in accounting practices. The study showed a positive influence of size, internationality, listing status, auditor type and ownership diffusion on voluntary compliance, but no significant relationship was found for leverage, profitability and capital intensity. Importantly, the findings suggested that it was political costs and pressures from outside markets that prompted companies to apply IAS and not simply, to solve monitoring problems between shareholders, managers and creditors.

Malik H. (2011) conducted a study on 35 listed life and non-life insurance companies of Pakistan for the period of 2005-2009, for investigating the determinants of profitability. It examined the effects of firm specific factors (age of company, size of company, volume of capital, leverage ratio and loss ratio) on profitability proxied by ROA. Though the results showed an absence of relationship between profitability and age, a significant positive relationship was observed between profitability and two variables namely, size of the company and volume of capital. Loss ratio and leverage ratio indicated a significant negative relationship with profitability. Charumathi B. (2012) conducted a similar study to model the factors that determined profitability of life insurers operating in India. Using linear multiple regression model, the author found that profitability was positively and significantly influenced by size and liquidity, whereas it had an inverse relationship with leverage, premium growth and logarithm of equity capital. There was no evidence of any relationship between underwriting risk and profitability. Similar findings were observed in a study of 18 Indian life insurers from 2007-08 to 2011-12 by Bawa S.K. and Chattha S. (2013), except that profitability was found to have no relationship with solvency and insurance leverage.

Methodology

Data Collection: The data collected for the study is secondary in nature. It has been collected from the IRDA database. The compliance information for each variable was derived by studying the annual reports of companies.

Sample Selection

As the study was related to non life (general)insurance, all the twenty eight non life insurers operating in India as on 31-3-2016 were selected for the purpose of the study.

Time period of Analysis

The study covered a period of 11 years from 2005-06 to 2015-16 for measuring the level of regulatory compliance by Indian non life insurers. The reason for choosing this period was that IRDA made public disclosures mandatory for non life insurers during 2010. Also, there was a mandatory requirement to disclose annual data for the prior period of 5 years, starting from 2005-06 to 2009-10. Due to non availability of compliance data from 2000-01 to 2004-05, the study was

confined to the period from 2005-06 to 2015-16.

Objectives of Study

To study the determinants of the level of regulatory compliance of Indian non life insurers.

Data Processing and Analysis Plan

To measure the level of regulatory compliance of non life insurance companies, an original, comprehensive, unweighted index called the **Non-life Insurance Regulatory Compliance Index(NLIRCI)** was constructed in the study, after studying the IRDA rules and regulations. Depending upon their relatedness, they were then divided into six groups/indices. The six groups identified were Obligation Fulfillment Index **(OFI)**, Stakeholders Protection Index (**SPI**), Public Disclosure Index (**PDI**), Financial Stability Index (**FSI**), Investment Guidelines Index (**IGI**) and Other Guidelines Index (**OGI**). Thus the **Non-life Insurance Regulatory Compliance Index (NLIRCI)** was derived as under :

NLIRCI=OFI + SPI + PDI + FSI + IGI + OGI

Each such index consists of several variables. Each variable has dichotomous value i.e. yes or no. Every insurer scores 1 point for compliance and 0 point for non compliance/partial compliance/if the company was not in existence during that year. For other variables which were not dichotomous in nature (i.e. grievance disposal and claim settlement), the actual level of compliance was measured using the exact ratios and the ratios were converted into points in terms of 1. The following table shows the six sub-indices of NLIRCI, with their variables.

Table 1
Table showing the six sub-indices of NLIRCI and its variables

Sub indices	Variables	Score	Total Score
Obligation Fulfillment Index(OFI)	1) Payment of Annual Fee	1	4
	2) Rural obligation	1	
	3) Social obligation	1	
	4) Declined Risk Pool	1	
Stakeholders Protection Index(SPI)	1) Advertisements and Disclosures	1	14
	2) Processing of Proposal Forms	1	
	3) Free Look Period	1	
	4) Manner of Receipt of Premium	1	
	5) Prohibition of Rebates	1	
	6) Claims Settlement	1	
	7) Grievance Disposal	1	
	8) Maintenance of Policy & Claim Records	1	
	9) Individual agents	1	
	10) Corporate Agents	1	
	11) Brokers	1	
	12) Banks as Insurance brokers	1	
	13) Referral Partners	1	
	14) Others:	1	
	Third Party Administrators		
	Surveyors & Loss Assessors		
	Web Aggregators		
Public Disclosure Index(PDI)	1) Actuarial Attribute	1	6
	2) Investment Attribute	1	
	3) Corporate Governance Attribute	1	
	4) Policyholder's Attribute	1	
	5) Financial Attribute	1	
	6) Insurance Agent Attribute	1	
Financial Stability Index(FSI)	1) Accounting Practices	1	4
	2) Solvency Margin	1	
	3) Expenses of Management	1	
	4) Prohibition of Loan	1	
Investment Guidelines Index(IGI)	1) Central govt. Security	1	5
	2) CG, SG & other Security	1	
	3) Approved Investment	1	
	4) Other than Approved Investment	1	
	5) Housing and Infrastructure	1	
Other Guidelines Index(OGI)	1) Requirement as to Capital	1	11
	2) Issuance of further Capital	1	
	3) Provision of documents during Investigation	1	
	4) Opening of New Place of Business	1	
	5) File and Use Procedure	1	
	6) Anti Money Laundering	1	
	7) Reinsurance	1	
	8) Micro-Insurance	1	
	9) Group Insurance	1	
	10) Insurance Repository	1	
	11) Reporting of Key persons	1	
Non-Life Insurance Regulatory Compliance Index (NLIRCI)			44

Equal weightage was given to each sub indice. Finally the Non-Life Insurance Regulatory Compliance Index (NLIRCI) score was arrived at by totaling the scores of all sub indices, and it was then converted into percentage terms.

The following table shows the compliance level of non-life insurers for a period of 11 years from 2005-06 to 2015-16.

Table 2
Level of Regulatory Compliance of Non-Life Insurers using the Non-Life Insurance Regulatory Compliance Index (NLIRCI)

No.	Names	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	National	99	96	93	98	99	86	96	99	97	99	99
2	New India	95	91	92	92	85	84	95	95	98	99	99
3	United India	99	99	97	98	95	84	72	99	92	99	99
4	Oriental	99	99	97	99	99	87	99	95	99	99	99
5	ECGC	99	99	99	99	98	99	98	99	99	98	99
6	AICI	99	98	99	99	99	94	81	98	98	98	99
7	Royal Sundaram	99	99	99	99	99	99	90	71	99	99	99
8	Reliance	99	99	98	99	99	95	95	91	95	99	99
9	IFFCO Tokio	100	99	92	99	99	87	99	96	99	99	100
10	Tata AIG	100	95	99	99	99	99	100	95	100	100	99
11	Bajaj Allianz	99	99	99	98	99	81	99	99	98	99	98
12	ICICI	100	99	97	96	94	77	99	95	84	99	99
13	Cholamandalam	100	98	97	96	90	71	100	95	99	99	99
14	HDFC ERGO	100	99	95	99	100	99	99	95	99	99	99
15	Star Health	NE	99	99	100	100	100	100	100	100	100	100
16	Apollo Munich	NE	NE	98	91	91	89	100	100	100	100	100
17	Future Generali	NE	NE	98	99	100	99	98	94	74	99	99
18	Universal Sompo	NE	NE	98	98	99	99	99	90	99	99	99
19	Shriram	NE	NE	NE	99	100	100	100	98	99	99	99
20	Bharti AXA	NE	NE	NE	98	92	100	100	95	99	99	100
21	Raheja QBE	NE	NE	NE	98	98	98	98	98	76	98	98
22	SBI	NE	NE	NE	NE	98	98	99	95	99	99	99
23	Max Bupa	NE	NE	NE	NE	98	98	100	100	100	100	100
24	L&T	NE	NE	NE	NE	NE	98	99	95	76	99	99
25	Religare Health	NE	NE	NE	NE	NE	NE	NE	99	100	100	100
26	Liberty Videocon	NE	NE	NE	NE	NE	NE	NE	98	99	100	99
27	Magma HDI	NE	NE	NE	NE	NE	NE	NE	98	99	99	99
28	Cigna TTK	NE	NE	NE	NE	NE	NE	NE	NE	98	99	99
N		14	15	18	21	23	24	24	27	28	28	28
Mean		99.07	97.86	97	97.76	96.96	98	96.45	95.66	95.5	99.10	99.14
Std. Dev.		1.27	2.26	2.4	2.3	3.95	8.46	6.69	5.6	7.8	0.57	0.52

Note: (1) Computed on the basis of disclosures by companies and from IRDA database. (2) NE means Not in Existence.

To study the determinants of regulatory compliance of Indian non life insurers using four predictors namely Company size, return on assets, liquidity and solvency, the following hypothesis was tested :

H_o: There is no influence of company size, return on assets, liquidity and solvency on the level of overall regulatory compliance(using NLIRCI)

H_1: There is an influence of company size, return on assets, liquidity and solvency on the level of overall regulatory compliance(using NLIRCI)

The dependent variable for the hypotheses was the compliance score of the insurer obtained using NLIRCI (Non Life Insurance Regulatory Compliance Index) and the independent variables were company size, return on assets, liquidity and solvency. Company Size was measured as the sum of total admitted assets of the insurer. Return on assets was taken as Profit before interest and tax/ admitted assets. Liquidity was measured as Outstanding Claims/ Cash and Bank balance. Solvency was measured as the ratio between available solvency margin and required solvency margin of the insurer.

Findings
The following results were obtained :

Table 3 : Regression Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.270a	.073	.058	5.05184	1.614

Results computed using SPSS

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	489.740	4	122.435	4.797	.001[a]
	Residual	6227.136	244	25.521		
	Total	6716.876	248			

Results computed using SPSS

Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	98.221	.626		156.790	.000		
	SIZE	-6.833E-9	.000	-.137	-2.177	.030	.966	1.036
	ROA	-.080	.057	-.091	-1.402	.162	.908	1.101
	LIQUIDITY	-.196	.055	-.225	-3.557	.000	.946	1.057
	SOLVENCY	.070	.134	.034	.522	.602	.912	1.097

Results computed using SPSS

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.270[a]	.073	.058	5.05184	1.614

Results computed using SPSS

The R-square value was found to be 7.3 % and Adjusted R-square value was 5.8 %. This means that the present model is able to explain 5.8 % variance in NLIRCI. The p- value is 0.001 which means the model is significant and we reject the null hypothesis at 5% level of significance. The p-value of the independent variables, company size and liquidity is 0.03 and 0.00 respectively, hence we fail to accept the null hypothesis and conclude that there is a significant influence of company size and liquidity on NLIRCI. The p value of the independent variables namely return on assets and solvency is 0.162 and 0.602 respectively and so we accept the null hypothesis that there is no significant influence of return on assets and solvency on NLIRCI. Thus, the influence of company size and liquidity on NLIRCI can be explained by the following regression equation :

NLIRCI = 98.221 – 6.833(company size) - 0.196 (liquidity) + ei

Test for Heteroskedasticity, Multicollinearity and Autocorrelation :

To meet the assumption of homogeneity of variance of residuals, the regression model was tested for heteroskedasticity. The residual mean of zero indicated that there was no problem of heteroskedasticity. Another assumption of Ordinary Least Square regression is that there should be no auto correlation in the error terms. Autocorrelation is measured by Durbin Watson Statistic. The Durbin Watson value of 1.614 indicated that there was no problem of autocorrelation. Also, for the proper functioning of the regression model, it was necessary to ensure that one independent variable did not affect the value of other independent variable and there was no problem of multicollinearity. Multicollinearity is measured by variance inflationary factor(VIF). As the VIF value in the regression result was less than 5, no such problem existed.

Conclusion

Under the supervisory guidance of IRDA, the insurance sector has marked significant growth. Earlier there were only a few state run insurers to meet the insurance needs of a vast growing economy, but now the number of registered insurers has increased to 59 (including the national reinsurer GIC). Also, insurance penetration and density has improved. Through the issue of various Regulations, Rules, Guidelines and Circulars, IRDA has ensured that the insurance companies do not act in a way which is detrimental to the interests of the policyholders' and the public faith in the institution of insurance is reposed. The results of the study show that the two independent variables, Return on assets and solvency have no influence on the level of regulatory compliance, whereas company size and liquidity have a negative influence on the level of compliance. This indicates that as company size increases, it becomes difficult for non-life insurers to ensure overall compliance. Similarly, as a company settles its claim liabilities, its liquidity decreases, though its compliance level increases.

REFERENCES

1. Bawa, S. K., and Chattha, S. (2013) Financial Performance of Life Insurers in Indian Insurance Industry. Pacific Business Review International 6(5), 44-52. Retrieved from http://www.pbr.co.in/November2013/7.pdf
2. Dumontier, P., & Raffournier, B. (1998). Why firms comply voluntarily with IAS: An empirical analysis with Swiss data. Journal of International Financial Management and Accounting, 9(3), 216-245. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/1467-646X.00038/abstract
3. Charumathi B. (2012). On the Determinants of Profitability of Indian Life Insurers – An Empirical Study. Proceedings of the World Congress on Engineering, London, U.K. Retrieved from http://www.iaeng.org/publication/WCE2012/WCE2012_pp505-510.pdf
4. Malik, H. (2011). Determinants Of Insurance Companies Profitability: An Analysis of Insurance Sector Of Pakistan. Academic Research International, 1(3), 315-321. Available at http://www.savap.org.pk/journals/ARInt./Vol.1(3)/2011(1.3-32)stop.pdf
5. Klumpes, P. J. M. (1997). Determinants of voluntary accounting policy choices by Australian life insurers. Working Paper 1997/001. The Department of Accounting and Finance, Lancaster University Management School. Retrieved from http://eprints.lancs.ac.uk/48566/1/Document.pdf